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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/765,431	765,431 01/26/2004 Mats Oberg		MP0148.I	1982	
	7590 03/08/200 CKEY & PIERCE P.L.	EXAMINER			
5445 CORPORA		YOUNG, BRIAN K			
SUITE 200 TROY, MI 4809	98		ART UNIT	PAPER NUMBER	
,			2819		
	\$				
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MON	VTHS	03/08/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Applica	ation No.	Applicant(s)				
		10/765	,431	OBERG ET AL.	OBERG ET AL.			
Office Action Summary			ner	Art Unit				
		Brian Y		2819				
Period fo	The MAILING DATE of this communicator Reply	tion appears on	the cover sheet with the	correspondence ad	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL nsions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this community of period for reply is specified above, the maximum statutor or to reply within the set or extended period for reply will, reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ING DATE OF 7 CFR 1.136(a). In no ation. ry period will apply an by statute, cause the	THIS COMMUNICATION event, however, may a reply be to divid will expire SIX (6) MONTHS from application to become ABANDON	N. imely filed In the mailing date of this of ED (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed o	n 21 December	⁻ 2006.					
2a)□	This action is FINAL . 2b)⊠ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
,_	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	on of Claims			,	,			
4)🖂	4)⊠ Claim(s) <u>2-35,37-53,55-88 and 90-106</u> is/are pending in the application.							
-	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠	5)⊠ Claim(s) <u>2-35,37-53 and 55-88</u> is/are allowed.							
6)⊠	6)⊠ Claim(s) <u>90-106</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction	n and/or election	n requirement.					
Applicat	on Papers							
9)[The specification is objected to by the Ex	xaminer.						
10)⊠	The drawing(s) filed on 26 January 2004	is/are: a)⊠ a	ccepted or b) objecte	d to by the Examir	ner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the	correction is req	uired if the drawing(s) is of	bjected to. See 37 C	FR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
3) Notice of Information Disclosure Statement(s) (PTO/SB/08)								
Paper No(s)/Mail Date <u>12/21/06</u> . 6)								

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Detailed Action

1. The IDS filed on 12/21/06 has been received and considered by the Examiner.

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 90-106 are rejected under 35 U.S.C. 101 because a computer program is claimed without reciting that the computer program is on a computer readable medium. Data structures not claimed as embodied in computer-readable media are descriptive Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

4. Claims 2-35,37-53,55-88 are allowed.

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5. The following is an examiner's statement of reasons for allowance: it is noted that the instant application is an RCE application. The claims recite an encoder encoding a communication signal, which includes a first precoder to precode the communication signal and determining a statistical measure of the precoded communication signal. Signal buffer buffers a signal associated with the communication signal. A DC tracking block generates a flip signal as function of a statistical measure of the precoded communication signal. The flip signal has a flip state and a nonflip state. A flip unit, responsive to the flip signal, flips an output of the signal buffer such that an average DC value of the precoded communication signal approaches zero. This type of encoder has not been shown in the prior art.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Young whose telephone number is 571-272-1816. The examiner can normally be reached on Mon-Fri 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Young

Prinfary Examiner

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